

REMARKS**Objections to Claims 20-26, 55-61, and 76-77**

The Patent Office allowed claims 20-26, 55-61, and 76-77 if rewritten in independent form. New claim 96 has been added which is claim 20 in independent form and thus is allowable. New claim 97 has been added which is claim 55 in independent form and thus is allowable. New claim 98 has been added which is claim 76 in independent form and thus is allowable. New claim 99 has been added which is claim 77 in independent form and thus is allowable.

Objection to Claims 27 and 28

The Patent Office objected to claims 27 and 28. The applicant has amended claims 27, 28, and 29 to correct a typographical error in that the "product indication signal" is generated rather than the "product indicator." This amendment is not being made for reasons of patentability.

Rejection of Claim 30 Under 35 U.S.C. § 112

The Patent Office rejected claim 30 as being indefinite under 35 U.S.C. § 112. The applicant has amended claim 30 to claim the detection of the laser beam signal being attenuated rather than a lower power rating than normal. Detecting a laser beam signal being attenuated is a broader limitation than detecting a lower power rating than normal since an attenuation may be caused by other phenomenon rather than just a lower power rating, such as by an obstacle in the laser beam path, such as a lens for example, or other malfunction. The rejection of claim 30 is now moot.

Rejection of Claims 1, 6, 10, 27, 32, 37, 41, 64, 65 Under 35 U.S.C. § 102(b) – Fossey

The Patent Office rejected claims 1, 6, 10, 27, 32, 41, 64, and 65 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,361,268 to Fossey et al. ("Fossey"). In order for an anticipation rejection to be proper, the single reference used as the basis for the rejection must disclose each and every limitation of the rejected claims. Fossey does

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not disclose, either expressly or inherently, a product detector that detects a product as it passes in front of the laser beam, and does not determine if the laser was emitted in proper relation to the product detection signal generated by the product detector as required by the rejected claims. Therefore, this rejection in view of Fossey is improper.

As claimed in the rejected claims, it is determined if the laser was emitted in proper relation to the product indication signal generated by a product detector. The specification of the present invention defines "in proper relation to" as a "correlation between a detected product 10 and the emission of laser beam 18." (Specification, p. 8, ¶ 37).

Fossey is a system that emits electromagnetic radiation at two different, widely separated wavelengths for different functionality, and the invention focuses on a method of quickly switching between these two different wavelengths and monitoring and matching the power of the radiation as needed to produce a beam of the required power strength (Background, col. 1, lines 18-25 and col. 2, lines 13-16 and 40-60). The Patent Office points to Figures 10 and 11 as its basis for the rejection. Figure 10 in Fossey discloses a laser beam detector (207) that detects a reflected beam (208) and then communicates this detected beam to the second stage (204) via a communication signal 9209). Figure 11 shows this same configuration. Also, at column 4, lines 33-44, Fossey discusses a direct detector for detecting the condition of a target (product) under illumination by the output beam and/or sensing the power of the beam.

However, nothing in Fossey, including the configurations in Figures 10 and 11, discloses, explicitly or impliedly, a product detector that detects the product as it passes in front of the laser beam and nothing is disclosed in Fossey that determines if the laser was emitted in proper relation to the product detection signal generated by the product detector. Therefore, this rejection is improper and must be withdrawn.

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Rejection of Claims 1, 13, 15-19, 28-29, 31-32, 44, 46-50, 52-54, 62-65
Under 35 U.S.C. § 103 – Fossey & Liska

The Patent Office rejected claims 1, 13, 15-19, 28-29, 31-32, 44, 46-50, 52-54, and 62-65 under 35 U.S.C. § 103 over Fossey in view of U.S. Patent No. 5,629,484 to Liska ("Liska").

The applicant has already addressed the deficiencies in Fossey above. Further, the applicant has amended each of the independent rejected claims, by amendment of independent claims 1, 32, 64, and 65, to add that a customer interface be additionally provided that accepts as input the laser beam detection signal, the product indication signal, and/or the error output signal. Support for this amendment is found in paragraphs 17, 18, 57, and 58 of the Specification. A "customer interface" can be any type of display, such as a Cathode Ray Tube (CRT) or Liquid Crystal Display (LCD), visual and/or audio alarm, or other visual and/or audio device to indicate the presence of error output signal (Specification, p. 15, ¶ 55). Claims 15 and 46 have been cancelled without prejudice since their limitation is present in claims 1 and 32 respectively, as amended. Neither Fossey nor Liska teach or suggest a "customer interface" and therefore these claims rejections cannot stand. Also, new claims 78-95 have been added as dependent claims off of independent claims 1 and 32 and are also thus allowable.

Further, neither Fossey nor Liska teach or suggest a counter being a flip-flop as claimed in original claims 18, 19, 53, and 54, or the product indication signal being comprised of a signal indicative of the movement speed of a product as claimed in original claims 28 and 29. Therefore, the rejection of these claims is also improper for this reason. New claims 100 and 101 are original claims 28 (in independent form) and 29, and thus are allowable.

Rejection of Claims 2-5, 11-12, 33-36, 42-43, 66-75 Under 35 U.S.C. § 103 –
Fossey, Liska, & Sanderson

The Patent Office rejected claims 2-5, 11-12, 33-36, 42-43, and 66-75 under 35 U.S.C. § 103 over Fossey in view of Liska and U.S. Patent No. 5,923,029 to Sanderson ("Sanderson"). The applicant has already addressed the deficiencies in Fossey above. As

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discussed above, the applicant has amended each of the rejected claims, by amendment of independent claims 1, 32, and 65, to provide a "customer interface" that accepts as input the laser beam detection signal, the product indication signal, and/or the error output signal. Neither Fossey, Liska, nor Sanderson teach or suggest this limitation and therefore these claim rejections cannot stand. It is not necessary for the applicant to address the Patent Office's other positions relating to Sanderson, but applicant reserves the right to do so in the future if required.

Rejection of Claims 6-9, 14, 37-40, 45, 51 Under 35 U.S.C. § 103 –
Fossey, Liska, & Wantanabe

The Patent Office rejected claims 6-9, 14, 37-40, 45, and 51 under 35 U.S.C. § 103 over Fossey in view of Liska and U.S. Patent No. 5,520,062 ("Wantanabe"). The applicant has already addressed the deficiencies in Fossey above. As discussed above, the applicant has amended each of the rejected claims, by amendment of independent claims 1 and 32, to require that a "customer interface" that accepts as input the laser beam detection signal, the product indication signal, and/or the error output signal. Neither Fossey, Liska, nor Wantanabe teach or suggest this limitation and therefore these claim rejections cannot stand. It is not necessary for the applicant to address the Patent Office's other positions relating to Wantanabe, but applicant reserves the right to do so in the future if required.

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